

ABSTRACT

A method and apparatus for the physico-chemical encoding of a collection of beaded resin (“beads”) to determine the chemical identity of bead-anchored compounds by in-situ interrogation 5 of individual beads. The present invention provides method and apparatus to implement color-coding strategies in applications and including the ultrahigh-throughput screening of bead-based combinatorial compounds libraries as well as multiplexed diagnostic and environmental testing and other biochemical assays.

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